

Forestry

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LIST OF PUBLICATIONS

OF THE

FOREST RESEARCH INSTITUTE, & COLLEGES.

PUBLISHED UP TO 31ST MAY, 1954.

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**PUBLICATIONS OF THE FOREST RESEARCH INSTITUTE
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PUBLIC RELATIONS ORGANISATION SERIES

Indian Forest Bulletins (New Series)

No.

- 142 1950. The practice of forestry compared with agriculture, by C. R. Ranganathan.
Unpriced.

SILVICULTURE SERIES

Indian Forest Bulletins (Old Series)

No.

- 4 1906. *Ficus elastica*: its natural growth and artificial propagation with a description of the method of tapping the tree and of the preparation of its rubber for the market, by E. M. Coventry. *Out of print.*
5 1906. Visit to some European schools of Forestry, by E. P. Stebbing. *Out of print.*
7 1906. *Chilgoza* forests of Zhob and the Takht-i-Suleman, by E. P. Stebbing. *Out of print.* (Originally published in the entomology series.)
9 1906. Influence of forests on the storage and regulation of the water-supply, by S. Eardley Wilmot. *Out of print.*

Indian Forest Bulletins (New Series)

- 2 1911. Teak plantations in Burma, by F. A. Leete. *Out of print.*
4 1911. Glossary of technical terms for use in Indian forestry, by A. M. F. Caccia and R. S. Troup. *Revised as Indian For. Rec. (n.s.) 2 (1), 1936.*
8 1912. Some germination tests with sal seed (*Shorea robusta*), by R. S. Troup. *Out of print.*
22 1913. Causes and effects of the drought of 1907 and 1908 on the sal forests of the United Provinces, by the same author. *Out of print.*
30 1915. Compilation of girth increments from sample plot measurements, by the same author. *Out of print.*
33 1916. Enquiry by the Government of India into the relation between forests and atmospheric and soil moisture in India, by M. Hill. *Out of print.*
41 1921. Weights of seeds, by S. H. Howard. *Out of print.*
45 1921. Miscellaneous forests of the Kumaon Bhabar, by E. A. Smythies. *Out of print.*
46 1921. Rate of growth of Bengal sal (*Shorea robusta*), I quality, by S. H. Howard. *Out of print.*
47 1922. Volume tables and form factors for sal (*Shorea robusta*), by the same author. *Out of print.*
52 1922. Classification of thinnings. Anon. *Revised as Indian For. Rec. (o.s.) 15 (1), 1930.*
58 1924. General volume tables for *chir* (*Pinus longifolia*), by S. H. Howard. *Out of print.*
* +62 1925. Preliminary yield table for *Dalbergia sissoo*, by the same author. *As. 0-2-0.*
65 1925. Tables for bark deductions from logs, by the same author. *Out of print.*
67 1925. *Chir* (*Pinus longifolia*) seed supply, by the same author. *Out of print.*
78 1932. Problem of the pure teak plantation, by H. G. Champion. *Revised as Indian For. Rec. (n.s.) 5 (1), 1942.*

SILVICULTURE SERIES—(contd.)

Indian Forest Bulletins (New Series)—(contd.)

- *82 1934. Measurement of standing sample trees, by H. G. Champion. Rs. 1-2-0.
- *83 1934. Provisional yield table for *Quercus incana* Roxb. (*Banj* or *Ban oak*), by H. G. Champion and I. D. Mahendru. As. 0-14-0.
- *86 1934. Cold weather planting in northern India, by H. G. Champion. As. 0-9-0.
- *87 1934. Von Wulffing yield tables for teak plantations in Java, by the same author. As. 0-14-0.
- *88 1934. Seasonal progress of height growth in trees, by the same author. As. 0-14-0.
- *89 1934. Effect of defoliation on the increment of teak saplings, by the same author. As. 0-3-0.
- *91 1935. Damage by frost at New Forest, Dehra Dun, during 1930 to 1934, by Bachaspati Nautiyal. As. 0-12-0.
- *106 1942. Control of *Lantana* by a sodium chlorate spray, by A. L. Griffith. As. 0-6-0.
- *107 1942. Note on *semul* (*Bombax malabaricum* D.C.), by Jagdamba Prasad. *Out of print*.
- *130 1946. Effects of burning on the soil as a preliminary to artificial regeneration by A. L. Griffith. Rs. 1-4-0.
- *131 1942. Controlled burning in a chir plantation, by T. V. Dent and S. N. Dabral. Rs. 1-4-0.
- *132 1946. Price-age gradient of Bori. (Hoshangabad, C. P.) teak, by Bakshi Sant Ram. Rs. 1-4-0.
- 133 1946. Afforestation of dry and arid areas, by R. L. Badhwar, A. C. Dey and A. L. Griffith. Rs. 1-4-0.
- *135 1947. Recording of soil and site characteristics in the field, by A. L. Griffith & R. S. Gupta. As. 0-8-0.
- *138 1947. Determination of the characteristics of soil suitable for sal (*Shorea robusta*), by the same authors. As. 0-7-0.
- *141 1947. Soil in relation to teak with special reference to laterisation, by A. L. Griffith & R. S. Gupta. Rs. 2-4-0.
- 162 1952. Notes on the utilization and silviculture of the timbers used in wood based industries of India compiled in the Silviculture Branch, Forest Research Institute, Dehra Dun. Rs. 1-12-0.
- 169 1953. The trees species of the tropical evergreen Ghat forests of Kanara (Bombay) and their rate of growth by G. S. Mathauda. Rs. 1-8-0.
- 172 An investigation into thinning cycles for young chir (*Pinus longifolia*) at New Forest, Dehra Dun, by V. S. Krishnaswami and G. S. Mathauda. As. 0-14-0.

Indian Forest Leaflets

- 22 1942. Possible war-time sources of vegetable rubber in India, by T. V. Dent. *Out of print*.
- *27 1942. Notes on some aspects of erosion control, by Jagdamba Prasad. *Reprinted* 1946. As. 0-8-0.
- 38 1943. Land use and erosion, by the same author. *Reprinted* 1947. As. 0-6-0.
- 38 1950. Land use and erosion by the same author. (Hindi edition.) *Unpriced*.
- +60 1944. Short note on the *beedi* leaf industry, by the same author. *Reprinted* 1949. As. 0-8-0.
- +64 1944. Growing of *Cryptostegia grandiflora* as a war-time emergency plantation crop, by A. L. Griffith. As. 0-4-0.
- +82 1945. Fodder trees in India, by M. V. Laurie. As. 0-8-0.
- +83 1945. Efficiency of enumerations 1.—The problem, by A. L. Griffith. As. 0-4-0.
- +84 1945. Efficiency of enumerations 2.—Madras tropical wet evergreen forest. 3.—Typical calculations, by the same author. As. 0-8-0.

SILVICULTURE SERIES—(contd.)

Indian Forest Leaflets—(concl'd.)

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- +89 1945. Efficiency of enumerations 9.—Distribution of the volume figures (contd.), by the same author. As. 0-4-0.
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- +91 1946. Efficiency of enumerations 11.—Distribution of the volume figures (contd.) by the same author. As. 0-4-0.
- *93 1946. Efficiency of enumerations 12.—One species in a mixed forest (Teak in a Madras moist-mixed deciduous forest) 13.—Confirmation of the *chir* (*Pinus longifolia*) and sal (*Shorea robusta*) data 14.—Summary of indications, by the same author. As. 0-5-0.
- *94 1946. Classification of silvicultural ledger files (sixth edition). As. 0-6-0.
- *96 1947. Efficiency of enumerations XV.—Sal (*Shorea robusta*) forest in Dehra Dun division of the United Provinces, by A. L. Griffith. As. 0-3-0.
- *117 1950. Yield tables for *Acacia mollissima*. As. 0-12-0.
- *120 1951. Unimeter; a versatile field instrument for foresters, surveyors, engineers and plane-tables, by K. Kadambi. As. 0-3-0.
- *130 1952. General formulæ for measurement of heights of trees, by V. S. Krishnaswamy. As. 0-12-0.

Indian Forest Memoirs

(N.B.—The part number is indicated within brackets after the volume number.)

- 1 (1) 1916. *Pinus longifolia* Roxb. A silvicultural study, by R. S. Troup. Rs. 5-0-0.

Forest Pamphlets

- 3 1908. Glossary of technical terms for use in Indian forestry, by A. M. F. Caccia Revised as *Indian For. Rec.* (n.s.) (2) (1), 1936.
- 5 1909. Sal in Bengal, by A. L. McIntire. *Out of print.*
- 6 1909. Forest reservation in Burma in the interests of an endangered water supply, by A. Rodger. *Out of print.*
- 8 1909. Collection of statistical data relating to the principal Indian species, by A. M. F. Caccia. *Out of print.*
- 9 1910. Table showing the progress in working plans in the provinces outside the Madras and Bombay Presidencies up to 31st December, 1908, by the same author. *Out of print.*
- 16 1910. Best season for coppice fellings of teak (*Tectona grandis*), by R. S. Hole. *Out of print.*

Indian Forest Records (Old Series)

(N.B.—The part number is indicated within brackets after the volume number.)

- 1 (2) 1908. Preliminary note on the development of the sal in volume and money-value, by A. M. F. Caccia. *Out of print.*
- 1 (4) 1909. 2. Selection system in Indian forests as exemplified in working plans based on this system with a short description of some continental methods, by the same author. *Out of print.*
- 2 (3) 1910. 1. Silviculture of *Hardwickia binata* (anjan), by D. O. Witt. *Out of print.*
- 2. Notes on sandal (Germination and growth of sandal seedlings), by M. Rama Rao. *Out of print.*

SILVICULTURE SERIES—(contd.;
Indian Forest Records (Old Series)—(contd.)

- 2 (4) 1911. Host plants of the sandal tree, by the same author. *Out of print.*
- 3 (1) 1911. Some statistical and other information regarding the teak forests of Burma, by R. S. Troup. *Out of print.*
- 5 (2) 1913. Blue gum plantations of the Nilgiris (*Eucalyptus globulus*), by the same author. *Out of print.*
- 6 (2) 1917. Statistics compiled in the Office of the Silviculturist. Forest Research Institute, Dehra Dun, during 1915-16. *Out of print.*
- 6 (5) 1918. Statistics compiled in the Office of the Silviculturist, Forest Research Institute, Dehra Dun, during 1916-17. *Out of print.*
- 7 (8) 1920. Afforestation of ravine lands in the Etawah district, U.P., by E. A. Smythies. *Out of print.*
- 8 (2) 1921. Regeneration of sal (*Shorea robusta*) forests, A study in economic ecology, by R. S. Hole. *Out of print.*
- 8 (4) 1922. Artificial regeneration in Bengal, by A. K. Glasson and others. *Out of print.*
- 9 (7) 1923. Possibilities of camphor cultivation from *Cinnamomum camphora* in Northern India, by S. H. Howard and others. *Out of print.*
- 10 (3) 1923. Sal (*Shorea robusta*) yield table for the United Provinces with an account of the types and distribution of sal forests in the U.P., by E. A. Smythies and S. H. Howard. *Out of print.*
- 10 (6) 1924. General volume tables for sal (*Shorea robusta*) classified by diameter and height, by S. H. Howard. *Out of print.*
- 11 (2) 1925. Contributions towards a knowledge of twisted fibre in trees, by H. G. Champion. *Out of print.*
- 11 (3) 1925. Regeneration with the assistance of taungya in Burma, by H. R. Blandford. *Out of print.*
- 11 (7) 1925. Volume tables for teak (*Tectona grandis*) and sal (*Shorea robusta*) for the Central Provinces, by V. K. Maitland. *Out of print.*
- 12 (1) 1925. Volume and outturn tables for sal (*Shorea robusta*), by S. H. Howard. *Out of print.*
- 12 (4) 1926. Yield table for clear-felled sal (*Shorea robusta*) coppice, by the same author. *Out of print.*
- 12 (5) 1926. Yield and volume tables for chir (*Pinus longifolia*), by the same author. *Out of print.*
- 12 (6) 1926. Yield and volume tables for deodar (*Cedrus deodara*), by the same author. *Out of print.*
- 12 (9) 1926. Artificial regeneration in North India, by the same author. *Out of print.*
- +13 (3) 1928. Commercial volume tables for sal (*Shorea robusta*) in the wet mixed forests of the Bengal Duars, by Parma Nand Suri. Rs. 0-6-0.
- +13 (4) 1928. Volume tables for sundri (*Heritiera fomes*, Buch. Syn. *H. minor* Roxb.) in the Sunderbans, Bengal, by the same author. Rs. 0-10-0.
- +13 (7) 1928. Slash in chir pine (*Pinus longifolia*) forests; Causes of formation, its influence and treatment, by J. E. C. Turner. Rs. 3-6-0.
- +13 (8) 1929. Volume and outturn tables for blue pine (*Pinus excelsa*, Wall), by H. G. Champion, I. D. Mahendru and Parma Nand Suri. Rs. 1-2-0.
- +13 (9) 1929. Commercial timber (*katha*) and heartwood volume tables for *khair* (*Acacia catechu* Willd) in North India, by the same authors. Rs. 0-14-0.
- +13 (10) 1929. Yield tables for blue pine (*Pinus excelsa*, Wall), by the same authors. Rs. 1-9-0.
- +14 (2) 1929. Denudation of the Punjab hills, by B. O. Coventry. Rs. 1-4-0.
- 15 (1) 1930. Classification of thinnings. *Out of print.*
- 15 (2) 1930. Glossary of technical terms for use in Indian forestry. Revised as *Indian For. Rec.* (n.s.) 2 (1). 1936.

SILVICULTURE SERIES—(contd.)

Indian Forest Records (Old Series)—(concl'd.)

- 15 (3) 1931. Standard, commercial and heartwood volume tables. Factory working for *khair* (*Acacia catechu* Willd.) in North India, by H. G. Champion and I. D. Mahendru. *Out of print.*
- 15 (4) 1932. Volume tables and diameter growth curve for *semul* (*Bombax malabaricum* D.C.), by I. D. Mahendru. *Out of print.*
- 15 (5) 1932. Provisional volume tables and diameter growth curves for *semul* (*Bombax malabaricum* D.C.) in the Central Provinces, by the same author. *Out of print.*
- 16 (6) 1932. Branch small wood tables for *Shorea robusta*, *Tectona grandis*, *Cedrus deodara*, *Pinus excelsa* and *P. longifolia*; compiled in the Statistical Section, F. R. I. *Out of print.*
- 15 (7) 1933. Provisional volume tables and diameter growth curves for *Holoptelea integrifolia* (kanju) and *Trewia nudiflora* (gutel), by I. D. Mahendru. *Out of print.*
- 15 (8) 1933. Multiple yield tables for deodar (*Cedrus deodara* Lou.), by H. G. Champion and I. D. Mahendru. *Out of print.*
- +16 (5) 1931. Investigations on the seed and seedlings of *Shorea robusta* Gaertn. F., by H. G. Champion and B. D. Pant. Rs. 1-6-0.
- 16 (6) 1932. Use of stumps (Root and shoot cuttings) in artificial regeneration, by the same authors. *Out of print.*
- +16 (7) 1932. Notes on *Pinus longifolia* Roxb.—Plantations in Dehra Dun and the Central Provinces and miscellaneous seed studies, by the same authors. Rs. 1-10-0.
- +17 (2) 1932. Treatment of *babul* (*Acacia arabica*) in Berar, by S. A. Vahid. *Out of print.*
- +17 (4) 1933. Sutelj Deodar—Its ecology and timber production, by R. M. Gorrie. As. 0-6-0.
- 17 (5) 1933. Importance of the origin of seed used in forestry, by H. G. Champion.
- +18 (12) 1933. Stand table for sal (*Shorea robusta*), evenaged high forest, by I. D. Mahendru. As. 0-5-0.
- +19 (3) 1933. Regeneration and management of sal (*Shorea robusta*), by H. G. Champion. Rs. 5-0-0.
- +20 (16) 1935. Stand table for sal (*Shorea robusta*), evenaged high forest and coppice. As. 0-12-0.

Indian Forest Records (New Series)

- 1 (1) 1936. Preliminary survey of forest types of India and Burma, by H. G. Champion. *Out of print.*
- *1 (2) 1936. Study of the soils in the hill area of the Kulu Forest Division, Part 1—An investigation of soil-profiles under deodar, spruce, blue pine and *chir* by E. McKenzie Taylor, I. D. Mahendru, M. L. Mehta and R. C. Hoon. Rs. 2-2-0.
- *1 (3) 1935. Distribution of sesquioxides, silica and organic matter in forest soil profiles of Kulu hill area, by R. C. Hoon. As. 0-12-0.
- +2 (1) 1936. Glossary of technical terms for use in Indian Forestry. (Reprinted 1946). As. 0-5-0.
- *2 (2) 1936. Standard and commercial volume tables for *Dalbergia sissoo*, by M. A. Kakazai. As. 0-8-10.
- *2 (3) 1936. Stand table for *chir* (*Pinus longifolia* Roxb.) evenaged high forest compiled in the Silviculture Branch. As. 0-12-0.
- *2 (4) 1937. Silviculture and management of the bamboo (*Dendrocalamus strictus*) by P. N. Deogun. (Reprinted 1940). Rs. 4-4-0.
- *2 (5) 1937. Seed weights plant per cents, etc., for forest plants in India, by J. N. Sen Gupta. Rs. 3-0-0.
- *2 (6) 1937. Formation of heartwood and its amount in deodar timber, by M. A. Kakazai. Rs. 2-4-0.

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Indian Forest Records (New Series)—(contd.)

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- *3 (1) 1938. Investigation into the best root length of stump to use when stump planting teak (*Tectona grandis*) in areas having a general West Coast type of climate, by A. L. Griffith. As. 0-8-0.
- *3 (2) 1938. Investigation into the best date of stump planting teak (*Tectona grandis*) at Begur, Dhoni and Topalip, by the same author. *Out of print*.
- *3 (3) 1938. Investigation into the relative merits of planting teak (*Tectona grandis*) stumps in pits and in crowbar holes in areas having a West Coast type of climate by the same author. As. 0-6-0.
- *3 (4) 1939. *Dipterocarpus (gurjan)* forests in India and their regeneration, by J. N. Sen Gupta. Rs. 4-14-0.
- *3 (5) 1939. Investigation into the best age and diameter of stump to use when stump planting teak (*Tectona grandis*) in areas having a general West Coast type of climate, by A. L. Griffith. Re. 1-0-0.
- *3 (6) 1939. Study of the soils in the hill areas of Kashmir. An investigation of soil profiles under deodar, blue pine, silver fir and chir, by R. C. Hoon. Rs. 1-14-0.
- *3 (7) 1939. Control and eradication of new outbreaks of the spike disease of sandal (*Santalum album*), by Rao Sahib S. Rangaswami and A. L. Griffith. Rs. 1-6-0.
- *3 (8) 1940. Artificial regeneration of the dry fuel forests of the Madras Province, by A. L. Griffith. Rs. 1-14-0.
- *4 (1) 1940. Canadian aerial forestry for Burma, by J. D. Braithwaite. Rs. 3-12-0.
- *4 (2) 1939. Investigation into the relative merits and costs of five different weeding methods in the formation of teak (*Tectona grandis*) plantations in area having West Coast type of climate, by A. L. Griffith. Rs. 1-10-0.
- *4 (3) 1941. Cultivation of the tung-oil tree (*Aleurites* spp.) in India, by M. V. Laurie and J. N. Sen Gupta. *Out of print*.
- *4 (4) 1941. Investigation into artificial regeneration details of the dry fuel forest of Madras, by A. L. Griffith. Rs. 2-8-0.
- *4 (5) 1942. Stump production in Madras teak nurseries, by the same author. Rs. 1-8-0.
- *4-A(1) 1940. Yield and stand tables for teak (*Tectona grandis* Linn. f.) plantations in India and Burma, by M. V. Laurie and Bakshi Sant Ram. Rs. 4-6-0.
- *4-A(2) 1941. Provisional yield tables for (*Dalbergia sissoo* Linn. f.) in the irrigated plantations of the Punjab, by Bakshi Sant Ram. Rs. 2-8-0.
- *4-A(3) 1942. Standard and commercial volume tables for teak (*Tectona grandis* Linn. f.) in the Central Provinces, by the same author. Rs. 2-4-0.
- +4-A(4) 1943. Yield and stand tables for sal (*Shorea robusta* Gaertn. f.) high forest, by A. L. Griffith and Bakshi Sant Ram. (Reprinted 1948). Rs. 6-10-0.
- *4-A(5) 1947. General standard and commercial volume tables for *Terminalia tomentosa* W. & A., by A. L. Griffith and others. Rs. 1-2-0.
- 5 (1) 1942. Problem of the pure teak plantation (A revision of Bulletin No. 78 of 1932), by M. V. Laurie and A. L. Griffith. *Out of print*.
- 5 (2) 1942. Teak plantation technique by A. L. Griffith. *Out of print*.
- +6 (1) 1946. English translation of the results of an erosion experiment published in the Proceedings of the Swiss Forest Research Institute, Vol. 23, Part 1—1945, by Hans Burger, translated by A. L. Griffith and C. W. A. Sondermann. Rs. 1-11-0.
- *6 (2) 1946. Stomates and early growth of some timber trees of the Malabar Coast, by A. L. Griffith. Rs. 2-12-0.
- *6 (3) 1947. Glossary of terms used in plant ecology, by N. L. Bor. As. 0-4-0.
- *7 (1) 1948. Seed storage—with particular reference to the storage of seed of Indian forest plants, by T. V. Dent. Rs. 3-14-0.

SILVICULTURE SERIES—(concl'd.)

Indian Forest Records (New Series)—(concl'd.)

- 7 (2) 1950. Burma forest types, according to Champion's classification, by M. V. Edward. Rs. 2-2-0.
- 7 (3) 1951. Tables showing the cubic contents of round and squared timber and the values of the same at various rates, arranged by L. Mercer, assisted by Nand Mal. Rs. 4-10-0.
- 7 (4) 1952. Forests catchment areas and water supplies by E. P. Stebbing Rs. 3-12-0.
- *8 (1) 1949. *Aleurites fordii*, Hemsl., by J. Prasad. Rs. 1-10-0.

Other Publications

- +1910 Practical determination of the girth increment of trees, by R. S. Troup. As. 0-4-0.
- +1916 Note entitled "Among the *Eucalyptus*", by R. C. Milward. Rs. 3-4-0.
- +1915 Note on the forests of Java and Madoera, by the same author. As. 0-13-0.
- +1926 Elementary Silviculture in Urdu, by Mohd. Hakim-ud-Din. Rs. 1-8-0.
- +1922 Methods of preparing volume and money yield tables for teak wood and volume and form factor tables for teak trees from data collected in the Nilambur teak plantation of the South Malabar Division, by R. Bourne. Rs. 9-0-0.
- 1927 System of filing information on forestry, by S. H. Howard. *Out of print.*
- *1933 Tables for use with Brandis Hypsometer for measuring the height of trees, etc., by F. B. Manson and H. H. Haines. As. 0-10-0.
- 1916 Note on some European silvicultural systems, with suggestions for improvement in Indian forest management, by R. S. Troup. *Out of print.*
- 1950 Proceedings of the 7th Silvicultural Conference, Dehra Dun, October 28th to November 6th, 1946. *Unpriced.*

Manuals

- 1910 Preparation of forest working plans in India, by W. E. D'Arcy. Revised by A. M. F. Caccia (4th edition). *Out of print.*
- 1931 Silviculture Research Manual for use in India, Vol. 1—(Experimental Manual) by H. G. Champion. *Out of print.*
- 1931 Silviculture Research Manual for use in India, Vol. 2—(Statistical Code) by H. G. Champion and I. D. Mahendru. *Out of print.*
- +1926 Manual of Forest Mensuration. Revised by C. Simmons. *Out of print.*
- +1922 Schlich's Manual of Forestry, Vol. 1 (4th edition). Rs. 7-8-0.
- *1948 Silviculture Research Code, Vol. 2.—Statistical Manual, by A. L. Griffith and Bakshi Sant Ram. Rs. 11-2-0.
- 1949 Silviculture Research Code, Vol. 3.—Tree and crop measurement, by A. L. Griffith and J. Prasad. Rs. 13-6-0.

Publications printed outside India

- +1921 Silviculture of Indian Trees, by R. S. Troup, 3 Vols. For forest officers and departmental libraries. Rs. 40-0-0. For public. Rs. 78-12-0.
- 1938 Manual of Indian Silviculture. Part I—General Silviculture, by H. G. Champion and Part 2.—Silviculture Systems, by Sir Gerald Trevor. *Out of print.*
- 1947 Manual of General Silviculture for India, by H. G. Champion and A. L. Griffith (Obtainable from Messrs. Oxford University Press, Bombay/Calcutta/Madras). Rs. 25-0-0. *Out of print.*
- +1926 Measurements of the Cubical Contents of Forest Crops, Oxford Forestry Memoirs No. 4, by M. D. Chaturvedi. Rs. 4-0-0.

STATISTICAL SERIES

Indian Forest Bulletins (New Series)

No.

- 146 1949. The efficiency of enumerations. I. Volume estimation of standing timber by sampling. II. Random and systematic sampling in timber surveys, by D. J. Finney. Rs. 1-14-0.

Indian Forest Leaflet

- 109 1950. On the application of statistical quality control methods in wood-base industries, by K. R. Nair (For official use only).
 131 1953. Statistical methods in forest products research, by K. R. Nair. As. 0-7-0.
 134 1953. Statistical methods in forest research, by K. R. Nair. As. 0-7-0.

BOTANY SERIES

Indian Forest Bulletins (New Series)

- 23 1914. Preparation of Indian forest floras and descriptive lists, by R. S. Hole. *Out of print.*
 25 1914. Development of the culms of grasses, by the same author. *Out of print.*
 +61 1925. Eucalyptus in the plains of North-West India, by R. N. Parker. As. 0-5-0.
 +63 1925. Eucalyptus trees in the Simla Hills, by the same author. As. 0-8-0.
 +73 1931. Herbarium of the Forest Research Institute, by the same author. As. 0-5-0. *Out of print.*
 +76 1932. List of plants collected in West Nepal. As. 0-4-0. *Out of print.*
 *80 1933. List of trees and shrubs for the Kashmir and Jammu Forest Circles, by W. J. Lambert. As. 0-12-0.
 *109 1942. Hints for botanical collectors, by M. B. Raizada. As. 0-2-0.

Indian Forest Memoirs

(N.B.—The part number is indicated within brackets after the volume number.)

- +1 (1) 1911. Some Indian forest grasses and their ecology, by R. S. Hole. Rs. 5-8-0

Indian Forest Records (Old Series)

- 4 (3) 1913. Useful exotics in Indian forests (No. 1—*Prosopis juliflora*, DC.), by R. S. Hole. *Out of print.*
 4 (4) 1913. On *Albizzia lathamil*, by the same author. *Out of print.*
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- §31 1942. Wood disc dowel joints in timber framed structures, by V. D. Limaye (*Reprinted*, 1944). Combined with *Indian For. Rec.* (n.s.) 3 (1) and *For. Bull.* 123. As. 0-6-0.
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- §37 1943. How to identify timbers, Part 3.—Timbers for motor lorry bodies, by K. A. Chowdhury. As. 0-6-0.
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- §41 1943. Studies on adhesives, Part 5.—A preliminary note on cold setting urea formaldehyde resin adhesives, by the same authors. (*Reprinted*, 1945). As. 0-4-0.
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- 45 1943. Preliminary studies on improved wood, Part 2.—Laminated wood, by D. Narayanamurti and Kartar Singh. *Out of print.*
- §46 1943. How to identify timbers, Part 4.—Timbers for boxes and packing cases, by S. S. Ghosh. (Reprinted, 1945.) As. 0-6-0.
- §49 1943. Interim note on inner coatings for plywood containers, by Wood Preservation Section, F.R.I. As. 0-4-0.
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- §65 1944. Conditioning chamber for plywood, by M. A. Rehman. As. 0-6-0.
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- §78 1945. Bending of skis, by M. A. Rehman and S. M. Ishaq. As. 0-6-0.
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- §80 1945. Index of the Series—"How to identify timbers", Parts 1-6, by K. A. Chowdhury, S. S. Ghosh and K. N. Tandon. As. 0-6-0.
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- *100 1948. Studies on adhesives, Part X.—Adhesives from castor seed cake and its proteins, by D. Narayanamurti and G. D. Dagg. As. 0-4-0.
- *101 1948. Resistance of wood to corrosion by hot chemicals, by D. Narayanamurti and V. Ranganathan. As. 0-2-0.
- *103 1948. Studies on Building Boards, Part II.—Preliminary studies on building boards from bamboos, by D. Narayanamurti and B. S. Bist. As. 0-5-0.

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- *105 1949. Studies on the shortage life of adhesives, Part II.—Aerolite 306, by D. Narayanamurti and J. N. Pande. As. 0-7-0.
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- *113 1949. Preliminary studies on improved wood, Part V.—Improved wood (laminated) made with Formvar resin, by D. Narayanamurti and J. N. Pande. As. 0-6-0.
- *114 1949. Influence of psychrometric conditions on the setting time of adhesives, by D. Narayanamurti and N. R. Das. As. 0-12-0.
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- *118 1949. Studies on Building Boards, Part IV.—Utilization of tree barks, by D. Narayanamurti and N. R. Das. As. 0-3-0.
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- 123 1951. Indigenous cellulosic raw materials for the production of pulp, paper and board. Part I.—Pulps for writing and printing papers from *Arundo donax*, by R. V. Bhat and K. C. Virmani. As. 0-7-0.
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- 126 1952. Treatment of Indian timbers for pencils and hand tools for pencil making, by M. A. Rehman and Jai Kishen. As. 0-4-0.
- 128 1952. Studies on adhesives, Part XVI. Plywood adhesives from cashew nut shell liquid, by D. Narayanamurti and C. P. Dhamaney. As. 0-5-0.
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- 1 (1) 1909. Indian woods and their uses, by R. S. Troup. *Out of print.*
- 2 (1) 1910. Prospects of the match industry in the Indian Empire, with particulars of proposed match factory sites and woods suitable for match manufacture, by the same author. *Out of print.*
- 2 (2) 1913. On the economic value of *Shorea robusta* (sal), by R. S. Pearson. Ra. 1-12-0.

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- 4 1909. Lac and lac cultivation, by D. N. Avasia. *Out of print.*
- 7 1909. Andaman marble-wood or zebra-wood (*Diospyros kurzii*, Hiern), by R. S. Troup. *Out of print.*
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- 12 1910. Petwun or trincomali wood (*Berrya ammonila*, Roxb.), by the same author. *Out of print.*
- 13 1909. Burmese in wood (*Dipterocarpus tuberculatus*, Roxb.), by the same author. *Out of print.*
- 14 1909. Burma padauk (*Pterocarpus macrocarpus*, Kurz), by the same author. *Out of print.*

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1940. No. 1 (Wood Preservation Series.—A short note on wood preservation for users in India, by D. Narayanamurti. *Out of print.*
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- 1 (3) 1. 1908. *Pterocarpus dalbergioides* Roxb. (Andaman padauk), by B. B. Osmaston. *Out of print.*
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- 6 (3) 1917. *Thitsi* (*Melanorrhoea usitata*, Wall), with special reference to the oleo-resin obtained from it, by E. Benskin and A. Rodger. *Out of print.*
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- 7 (2) 1919. Further note on *thitsi* (*Melanorrhoea usitata* Wall), with special reference to the oleo-resin obtained from it in the Lawksawk and Myelat States Southern Shan States Forest Division, by F. A. Wright. *Out of print.*
- 7 (6) 1919. Note of the mechanical strength and seasoning properties of *Shorea robusta* (sal) timber, by R. S. Pearson. *Out of print.*
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- 9 (5) 1922. Further experiments in the air-seasoning of Indian timbers and general recommendations as to seasoning methods, by C. V. Sweet, with a chapter on "Damage to timber by insects", by C. F. C. Beeson. *Out of print.*
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- 10 (9) 1924. Tanning investigation of some Burmese *Dipterocarps*, by J. A. Pilgrim. *Out of print.*
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- +20(13) 1935. Results of experiments on the kiln-drying of wood with ozonized air, by S. N. Kapur. As. 0-8-0.
- 20(14) 1934. Interim report on work under Project VIII.—Testing of Indian timbers for veneer and plywood, by W. Nagle. *Out of print.*
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- 1 (4) (*Withdrawn*).
- 1 (5) 1937. Second interim report on work under Project VIII.—(Testing of Indian timbers for veneers and plywood), by W. Nagle. *Out of print.*
- 1 (6) (*Withdrawn*).
- 1 (7) 1938. Official list of trade names of Indian Timbers. (*Revised 3rd edition*). *Out of print.*
- 1 (8) 1939. Air seasoning characteristics of some Indian woods (Supplement to the Manual on the air seasoning of Indian timbers), by S. N. Kapur and M. A. Rehman. *Out of print.*

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- §1A 1939. Comparative strengths of some important Indian timbers and their uses, by V. D. Limaye. (Reprinted 1943). As. 0-12-0.
- *2 (1) 1939. Formation of growth rings in Indian trees, Part 1.—(a) *chir* (*Pinus longifolia*), (b) *cutch* (*Acacia catechu*), (c) *jaman* (*Eugenia jambolana*), (d) *laurel* (*Terminalia tomentosa*), (e) *sal* (*Shorea robusta*), (f) *semul* (*Bombax malabaricum*), and (g) *teak* (*Tectona grandis*), by K. A. Chowdhury. Rs. 2-2-0.
- *2 (2) 1940. Formation of growth rings in Indian trees, Part 2.—(a) *champ* (*Michelia champaca*), (b) *kokko* (*Albizia lebbek*), (c) *sissoo* (*Dalbergia sissoo*), (d) *toon* (*Cedrela toona*), by the same author. As. 0-12-0.
- *2 (3) 1940. Formation of growth rings in Indian trees, Part 3.—A study of the effect of locality, by the same author. Re. 1-0-0.
- *2 (4) 1941. Third interim report on work under Project VIII.—(Testing of Indian timbers for veneers and plywood). As. 0-9-0.
- *2 (5) 1941. Experiment on the air seasoning *Pinus longifolia* (*chir*) sleepers in the East Almorah Division, U.P., by M. A. Rehman. Rs. 1-2-0.
- *2 (6) 1942. Thermal conductivity of Indian timbers, Part 1.—Variation of conductivity with density in the air-dry condition at ordinary temperature, by D. Narayanamurti and V. Ranganathan. As. 0-9-0.
- 2 (7) 1942. Indian timbers for aircraft and gliders, by V. D. Limaye. *Out of print.*
- *2 (8) 1942. Testing and suitability of Indian timbers for plywood tea chests, by V. D. Limaye and Sultan Mohammed. As. 0-9-0.
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- 2(11) 1942. Manufacture of plywood in India, compiled by S. N. Kapur. *Out of print.*
- §3 (1) 1943. Timber roof trusses with solid wood disc dowel joints, by V. D. Limaye. (Combined with *Indian For. Leaflet* No. 31 and *Forest Bull.* No. 123). As. 0-6-0.
- 3 (2) 1943. Thermal conductivity and other properties of some indigenous materials, by D. Narayanamurti. As. 0-6-0.
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- §3 (7) 1945. Regional keys for the identification of important timbers used in military areas of inspection, Parts I, II and III, by the same author. *Out of print.*
- *4 (1) 1946. Safe working stresses for Indian timbers, by V. D. Limaye. As. 0-5-0.
- *4 (2) 1947. Seasoning and shrinkage of bamboo, by M. A. Rehman and S. M. Ishaq. Rs. 1-2-0.
- *4 (3) 1947. Some more commercial timbers of India, by K. A. Chowdhury and S. S. Ghosh. Rs. 1-10-0.

Other Publications.

1912. Commercial guide to the economic forest products of India, by R. S. Pearson. *Out of print.*
- †1925. Development of India's forest resources. Compiled by the Economic Branch of the Forest Research Institute, Dehra Dun. Rs. 2-12-0.

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- Project No. I, 1923. Mechanical, physical, and structural properties of wood grown in India, by L. N. Seaman. *Out of print.*
- †Project No. II, 1925. Tests of Indian timbers in structural sizes, by the same author. As. 0-8-0.
- †Project No. IV, 1925. Mechanical strength, seasoning properties, treatment of, and key to certain Indian sleeper woods, by R. S. Pearson, L. N. Seaman, C. V. Sweet, J. H. Warr and H. P. Brown. As. 0-9-0.
- †Project No. V, 1924. Testing of raw materials (Paper-pulp Section), by W. Raitt. As. 0-5-0.
- Project No. VII, 1926. Kiln seasoning of Indian timbers, by S. Fitzgerald and S. N. Kapur. *Out of print.*
- Project No. VIII, 1929. Testing of Indian woods for veneer and plywood, including tests on glues, by W. Nagle and Project No. o/k Mechanical Tests, by L. N. Seaman. *Out of print.*
1944. Common Commercial timbers of India and their uses (third edition), by H. Trotter, obtainable from M/s. Jugal Kishore & Co., Rajpur Road, Dehra Dun. Rs. 2-8-0.
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- *1935. Rules for the grading of teak squares, by L. N. Seaman and V. D. Limaye. As. 0-6-0. *Out of print.*
- §Charts for the design of timber beams, by V. D. Limaye. As. 0-4-0.

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- §2 1938. Laminated wood, by the same author. As. 0-4-0.

Manuals

1907. Indian Forest Utilisation, by R. S. Troup. *Out of print.*
1934. Manual on the Air Seasoning of Indian Timbers, by S. N. Kapur. *Out of print.*
- *1925. Elementary Manual on Indian Wood Technology, by H. P. Brown. Re. 1-0-0.
1940. Manual of Indian Forest Utilisation, by H. Trotter (obtainable through Oxford University Press, Bombay). *Out of print.*

Special Lecture Notes for Indian Forest Students.

1925. Minor forest products of India, by H. Trotter. *Out of print.*
1925. Preservation of timber, by J. H. Warr. *Out of print.*
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- †1925. Timber strengths and timber testing, by L. N. Seaman. As. 0-8-0.
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- †1932. Commercial Timbers of India, by R. S. Pearson and H. P. Brown. 2 Vols. For forest officers Rs. 47-0-0. For public Rs. 67-0-0.
1922. Manual of Indian Timbers, by J. S. Gamble. *Out of print.*

WOOD TECHNOLOGY SERIES

Indian Forest Records (New Series)

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- *1 (2) 1950. The formation of growth rings in Indian trees, Part V.—A study of some discs of sandal wood (*Santalum album*), by K. A. Chowdhury and S. S. Ghosh. Rs. 2-0-0.
- 1 (3) 1951. West Bengal Commercial Timbers (their identification, properties and uses), by K. A. Chaudhury. Rs. 3-6-0.

Indian Forest Records (New Series) Composite Wood and Wood Preservation.

- 1 (1) 1951. Weathering trials on aircraft wings, by D. Narayanamurti, A. Purushotham, V. Ranganathan, N. C. Jain, J. N. Pande, Joseph George and B. S. Bist. Rs. 2-0-0.

Indian Forest Records (New Series) Composite Wood

- 1 (1) 1952. Weathering trials on some synthetic resin bonded aircraft components, by D. Narayanamurti, Subramanyam and N. R. Das. As. 0-12-0.

Indian Forest Records (New Series) Timber Mechanics.

- 1 (1) 1952. Strength of bamboo (*Dendrocalamus strictus*), by V. D. Limaye. As. 0-14-0.

TIMBER DEVELOPMENT SERIES

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- 36 1942. River Training works, by J. L. Harrison. (Reprinted, 1945.) As. 0-9-0.
- +62 1944. Fire places, by the same author. (Reprinted, 1945.) As. 0-6-0.

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